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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/854,771	05/14/2001	Yoshifumi Nishida	450100-03218	8147
20999	7590	08/16/2004	EXAMINER	
FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151			LIN, KENNY S	
			ART UNIT	PAPER NUMBER
			2154	

DATE MAILED: 08/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/854,771	Applicant(s) NISHIDA ET AL.	
	Examiner Kenny Lin	Art Unit 2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5/14/2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-3 are presented for examination.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-3 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claim where it recites “weighing is performed according to the value calculated by: $\text{Weight} = (b_{cx} + B_{\text{excess}} / n) / B_{\text{all}}$, and said band of class C_x is determined and scheduled” is directed to non-statutory subject matter because it is an abstract idea. A claim to an “abstract idea” is non-statutory because it does not represent a practical application of the idea.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-3 provides for the use of scheduling band when transmitting data to other devices over a network, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim

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is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 1-3 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

6. Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The claims comprise no steps.

7. Claims 1-3 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

The claim(s) are narrative in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. The claim(s) must be in one sentence form only. Note the format of the claims in the patent(s) cited.

8. Claim 1 recites the limitation "the borrowable attribute" in line 7. There is insufficient antecedent basis for this limitation in the claim.

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9. Claim 2 recites the limitation "the borrowable attribute" in line 7. There is insufficient antecedent basis for this limitation in the claim.

10. Claim 3 recites the limitation "the borrowable attribute" in line 8. There is insufficient antecedent basis for this limitation in the claim.

11. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim language "a recording medium" does not particularly point out that the recording medium is computer-readable. This can be interpreted as a notebook with written computer program code as the computer-readable program. Applicant is suggested to change "A recording medium" to "A computer-readable recording medium" to further define the claim.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elwalid et al (Elwalid), US 6,353,616.

14. As per claims 1-3, Elwalid taught the invention substantially as claimed including an information processing device, an information processing method and an recording medium record with a computer-readable program for scheduling band when transmitting data to other devices over a network (abstract, col.3, lines 59-67, col.4, lines 1-4, 8-21, 45-57, col.5, lines 13-27, col.6, lines 16-23).

15. Elwalid did not specifically teach to perform weighting by:

$$\text{Weight} = (b_{cx} + B_{\text{excess}} / n) / B_{\text{all}},$$

to determine and schedule band of class C_x , wherein when said band allotted to class C_x is expressed as b_{cx} , the total surplus band not allotted to any class is B_{excess} , the total utilizable band of an entire class possessing the borrowable attribute is B_{all} , and the total number of classes possessing the borrowable attribute is set as n .

16. However, Elwalid taught to use an alternative equation in calculating the weights of classes (col.3, lines 12-20, 59-67, col.4, lines 1-4, 8-21, 45-57, col.5, lines 13-27, col.6, lines 16-23, 60-62, col.7, lines 7-67, col.8, lines 1-14, 36-56) to overcome the disadvantages of using a fixed weight (col.6, lines 35-62). Elwalid further stated that alternative embodiments may employ any number of modification to the adaptive determination of weights to further account for characteristics of the packet network (col.9, lines 8-11). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Elwalid

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and use a alternative weight determination equation to derive similar results in scheduling band (col.6, lines 35-62, col.9, lines 8-11).

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shreedhar et al, Efficient Fair Queuing using Deficit Round Robin, 1995, ACM Press, pages 231-242.

18. A shortened statutory period for reply to this Office action is set to expire THREE MONTHS from the mailing date of this action.

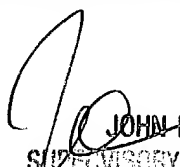
19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenny Lin whose telephone number is (703)305-0438. The examiner can normally be reached on 8 AM to 5 PM Tuesday to Friday and every other Monday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (703)305-8498. Additionally, the fax numbers for Group 2100 are as follows:

Official Responses: (703) 872-9306

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

ksl
August 6, 2004


JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100